



## Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

## A NEW HOST FOR CLAVICEPS

HERBERT GROH

While making an examination of a quantity of wild hay received from Beauce County, in the province of Quebec, Canada, in December, 1909, I discovered that occasional spikes of a *Carex*, which constituted a large part of the hay, contained sclerotia of *Claviceps*. Suspecting this to be an exceptional host for the fungus, I made a search of the literature on the subject, with the result that I was unable to discover any record of a similar occurrence. Attempts were made to study the germination of the sclerotia, with a view to observing their further development, but, unfortunately, without success. The specimens were kept on moist, sterile sand in a Petri dish under ordinary living-room conditions of temperature, but, even after a lapse of several months, they had failed to develop stromata. Nothing is known of the history of the hay with which they had been gathered, and I have no doubt that age or the conditions of storage had influenced their power of germination. As no prospect remains now of gaining any more information about this interesting species, it seems advisable to put on record at least the fact of its discovery on *Carex*.

The sedge on which the sclerotia were found was identified as *Carex stellulata* Good. var. *angustata* Carey. Other Cyperaceae, including a number of other species of *Carex*, *Scirpus* and *Eriophorum*, and also a number of agricultural and wild grasses, were present, but on none of these were any sclerotia observed.

The appearance of the sclerotia *in situ* is shown in the accompanying drawing of representative specimens. Both macroscopically and microscopically, they are not unlike those occurring on grasses, and are undoubtedly *Claviceps* sclerotia. Their size varies from scarcely larger than the healthy perigynia to 5 mm. or more in length. Many of the smaller specimens appear to retain the features of the displaced perigynia at their tips.

With only this single stage of the fungus known, it is, of course, impossible to reach any conclusion as to its specific posi-

tion. It is not unlikely that it may be related to *Claviceps nigricans* Tul. occurring on *Eleocharis* and *Scirpus*, which are, I believe, the only members of the Cyperaceae at present recorded as being attacked by *Claviceps*. In this connection, mention may be made of a fungus described by Griffiths in the *Bulletin of the*

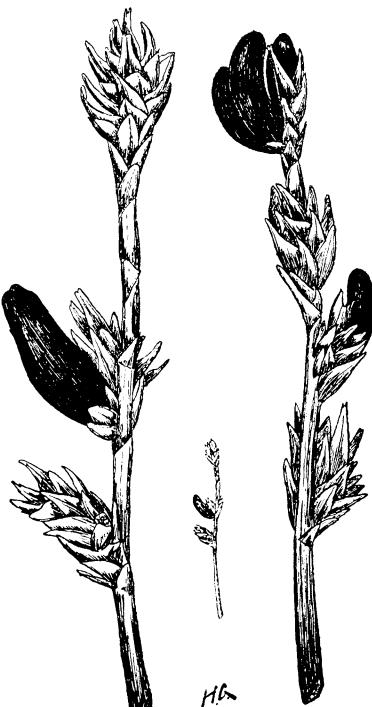


FIG. 1. Sclerotia of *Claviceps* on *Carex stellulata angustata*.  $\times \frac{3}{4}$ .

*Torrey Botanical Club*, Vol. 29, p. 300, and referred doubtfully to *Claviceps*. The sclerotial bodies there described were found, not on the reproductive organs, but inside the culms of the host, which was *Carex nebrascensis* Dewey. Through the courtesy of Dr. Griffiths I have been enabled to examine his specimens, which I find are clearly distinct from the ones under consideration here. They proved to be *Sclerotium sulcatum* Desm. (Ann. Sci. Nat. III. 16: 329. 1851), with the conidial stage *Epidochium ambiens* Desm. (See Brefeld, Mycol. Unters. 10: 317). The detached sclerotia of the fungus certainly resemble ergot grains very closely. The fungus of Dr. Griffiths was kindly determined by Mr. H. T. Güssow, Dominion Botanist.